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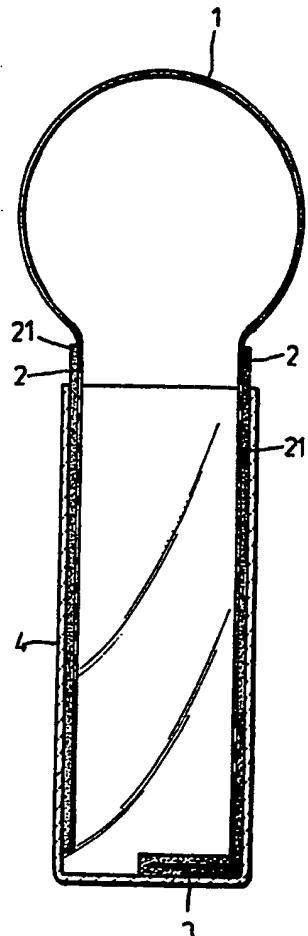
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U1S S1787 S1808

(56) Documents Cited
GB 1086947 A US 4317249 A

(58) Field of Search
UK CL (Edition K) A4F, A4K
INT CL⁵ B08B
Online databases:WPI

(54) Cleaning tool for bottles or glasses

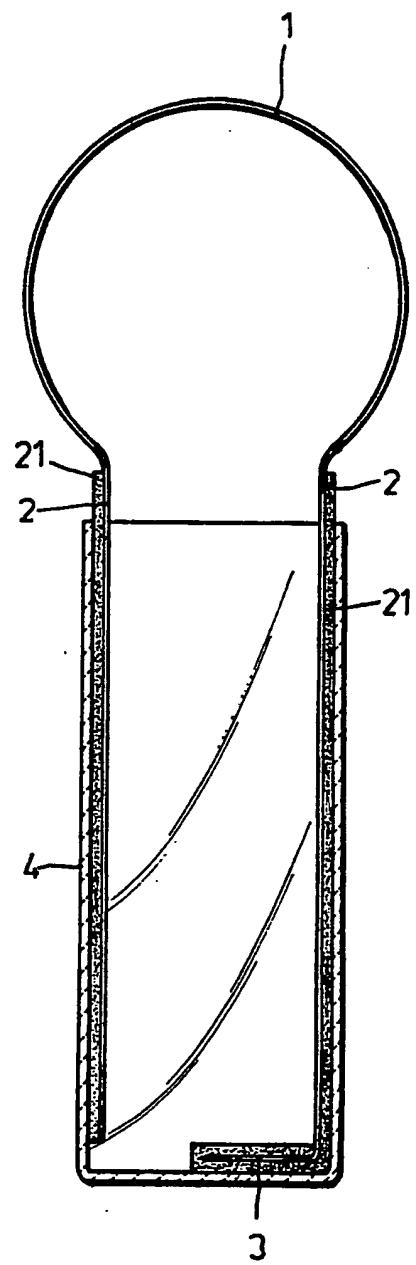
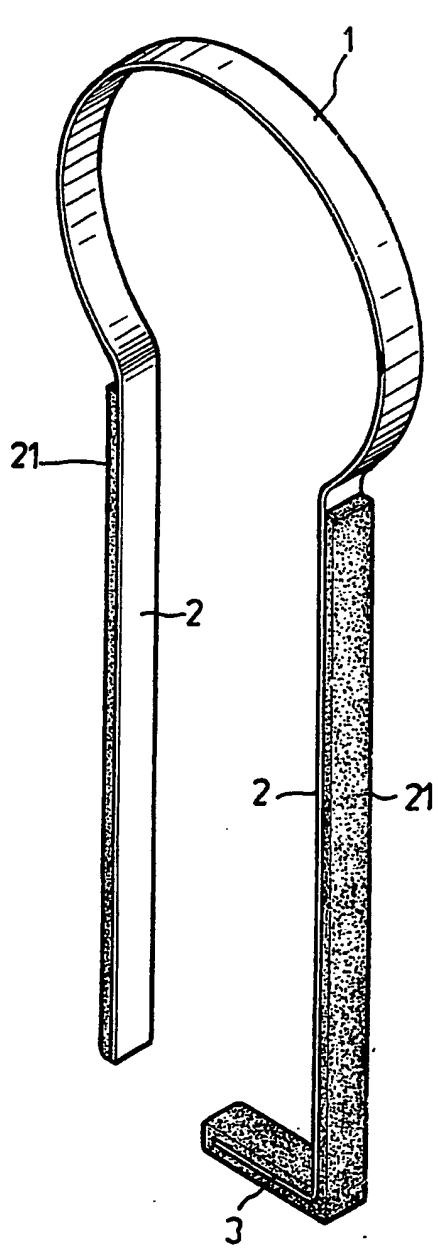
(57) A bottle or glass cleaning tool comprises two arms 2 extending downwardly from a handle, and a scraper 3 extending laterally from the bottom end of one of said arms 2. The outwardly facing surfaces of the scraper and the arms are covered with sponge or like material 2 for cleaning the inside of the bottle or glass. The handle, arms and scraper are made from flexible material.



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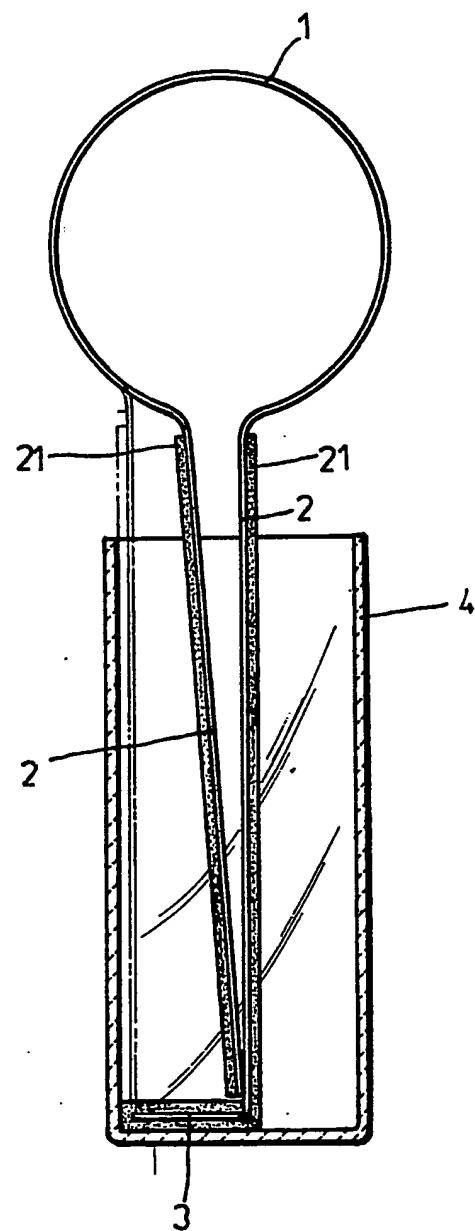


FIG.3

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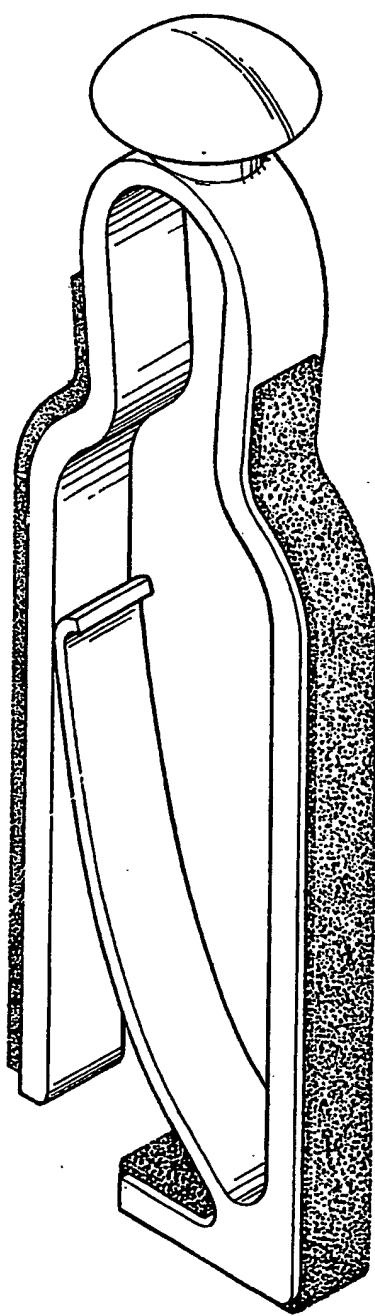


FIG.4

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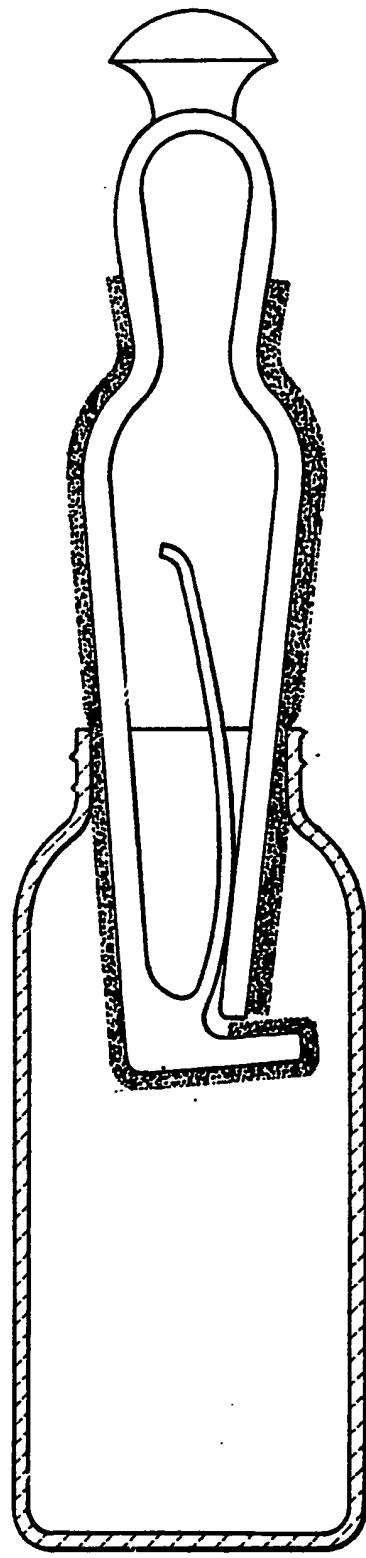


FIG.5

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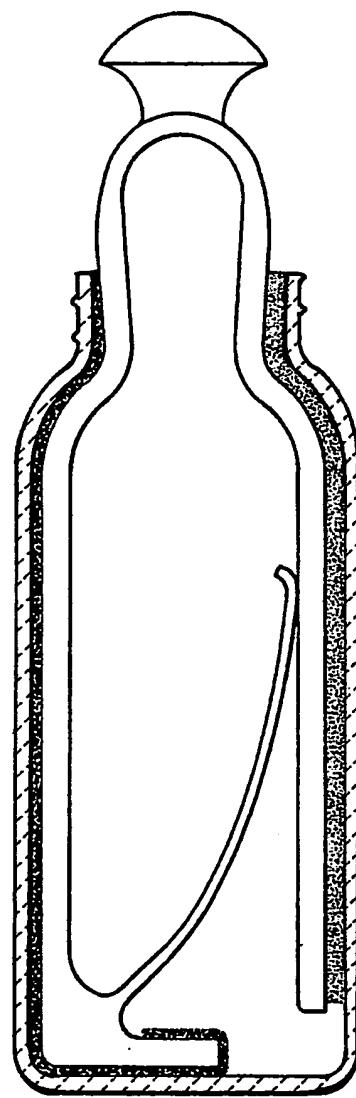


FIG.5-1

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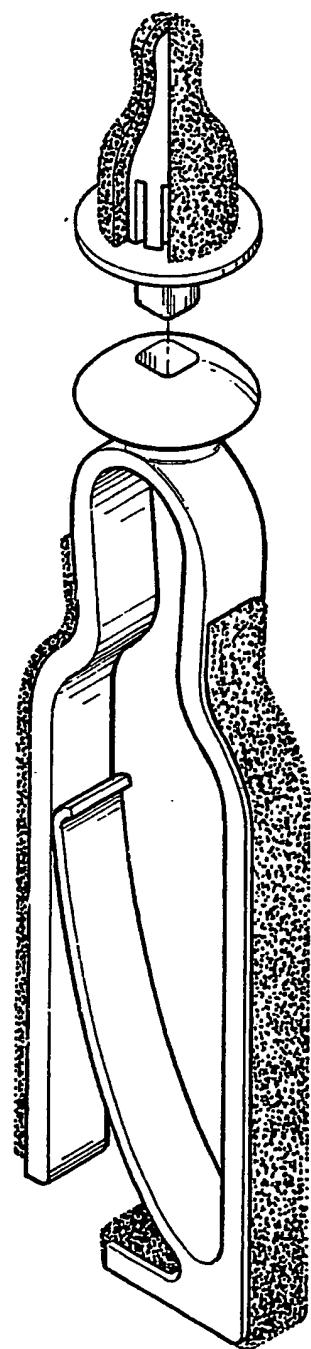


FIG.6

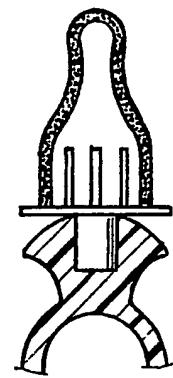


FIG.7

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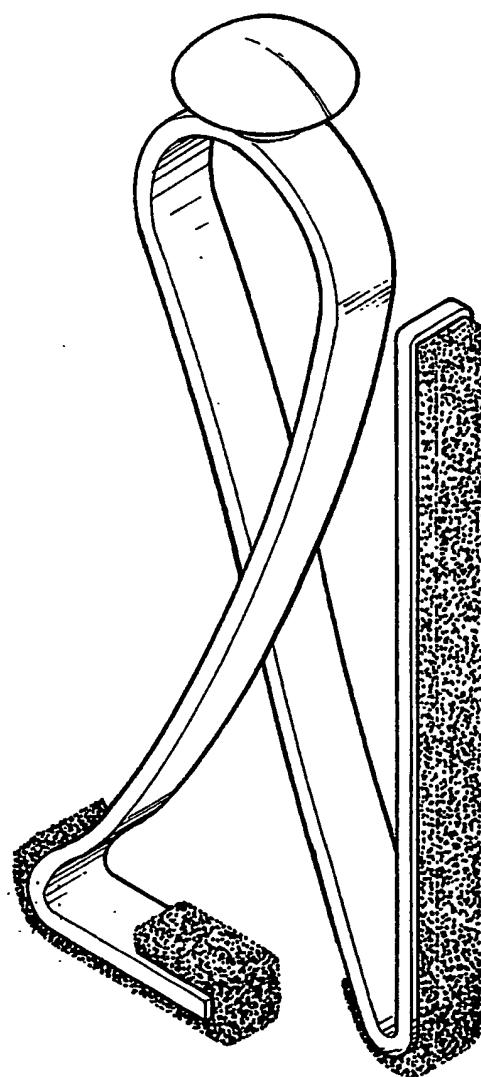


FIG.8

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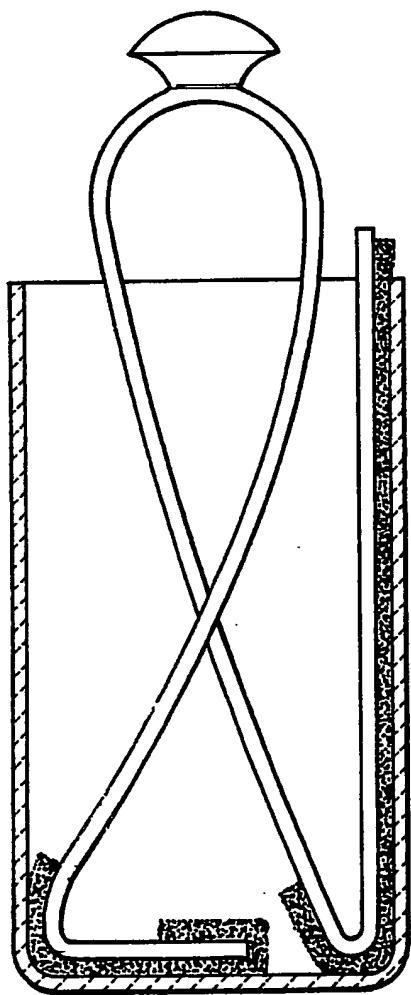


FIG.9

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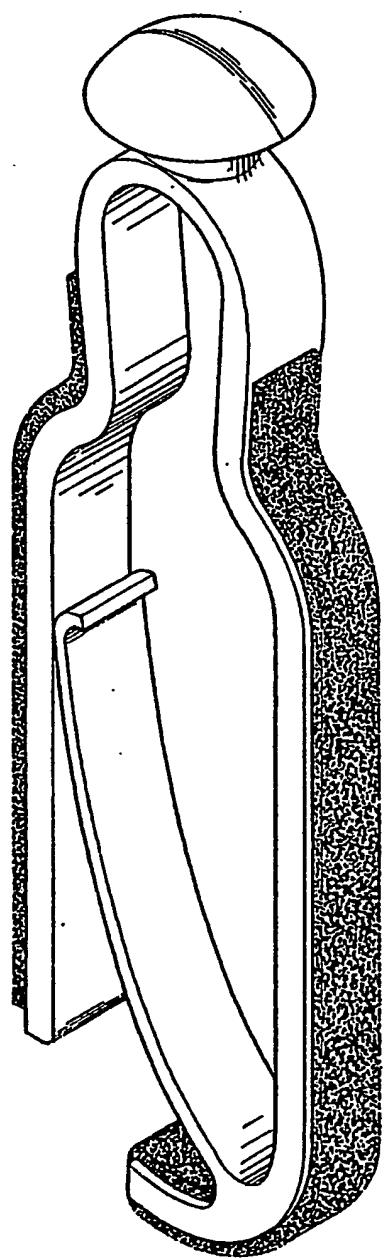


FIG.10

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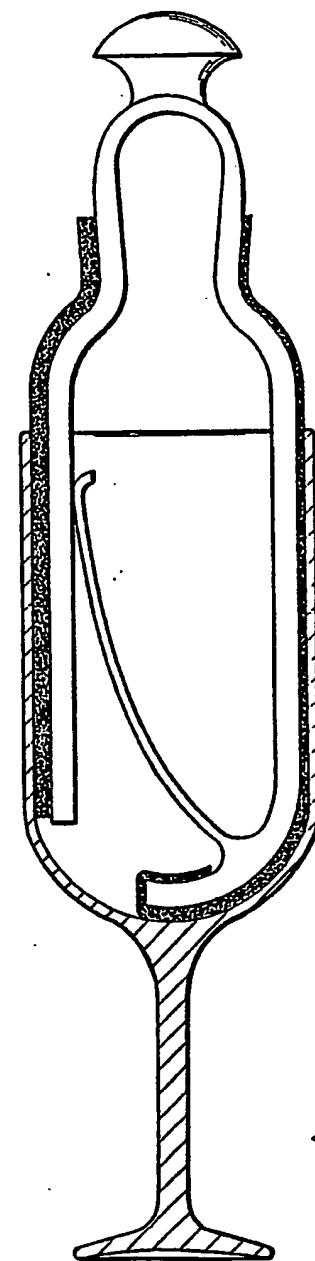


FIG.11

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TITLE: CLEANING TOOL FOR BOTTLE OR GLASS

FIELD OF THE INVENTION

This invention relates to a cleaner. More particularly, to a cleaning tool to clean interior of a 5 bottle, a glass, or the like.

BACKGROUND OF THE INVENTION

Brush is one of the tools adapted to clean the interior of a bottle or glass. However, sometimes there are defiladed spaces such as the bottom or the neck areas 10 that brush can not reach and therefore, spots are remaining permanently.

In view of this, the inventor has invented the present invention which is able to clean all defiladed spaces.

SUMMARY OF THE INVENTION

It is the primary object of the present invention to provide a cleaning tool for bottle or glass which is able to clean all defiladed spaces.

5 It is another object of the present invention to provide a cleaning tool for bottle or glass which is easy to use.

It is a further object of the present invention to provide a cleaning tool for bottle or glass which is easy 10 to clean.

It is still a further object of the present invention to provide a cleaning tool for bottle or glass which is inexpensive to produce.

Although the novel features which are believed to be 15 characteristic of the invention pointed out in the annexed claims, the invention, as to its objects and advantages and the manner in which it may be carried out, may be better understood by reference to the following descriptions taken in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a first embodiment of the present invention;

FIG. 2 is a plan elevational view of FIG. 1, being 5 cleaning an interior of a glass;

FIG. 3 is another side elevational view of FIG. 2 showing a second method of cleaning the interior of a glass;

FIG. 4 is a perspective view of a second embodiment 10 of the present invention;

FIG. 5 is a plan elevational view of FIG. 4, located halfway in a bottle;

FIG. 5A is a further view of FIG. 5 having the present invention located in a bottle;

15 FIG. 6 is a perspective view of a third embodiment of the present invention;

FIG. 7 is an enlarged view of FIG. 6 showing a handle having a nipple cleaner, partially sectioned;

FIG. 8 is a perspective view of a fourth embodiment;

20 FIG. 9 is a plan elevational view of FIG. 8 located in a glass, partially sectioned;

FIG. 10 is a perspective view of a fifth embodiment of the present invention; and

FIG. 11 is a plan elevational view of FIG. 10 located 25 in a cocktail glass.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Rerference is now made to the drawings in which FIG. 1 shows a first embodiment of the present invention which is essentially composed of a handle 1 for handling purpose, 5 two arms 2 extending downwardly from the handle 1 being formed integrally and in parallel to each other, and a scraper 3 being formed perpendicularly thereto from one end of one of the arm 2 and in a right angle thereto and has a length larger than the distance between the two arms 2.

10 Sponge or the like material are attached to the outer portions of the arms 2 and the scraper 3 as cleaner to wipe off all residues in a glass as shown in FIGS. 2 and 3. The arms 2 and scraper 3 are made from a flexible material which is able to be bent by force and will return to its 15 original position upon bending force is disappered. A leaf sspring 22, extending upwardly from the corner hat the arm 2 and the scraper 3 are connected and having its end 221 in touch with the inner upper portion of the other arms 2, is adapted to provide a restoring force to the two arms 2, as 20 shown in FIGS. 5 and 5A.

Two shoulders 21 are formed at respective upper portions of the arms 2, as shown in FIG. 4, adapted to clean inner shoulder of a bottle 5, as shown in FIG. 5.

A hard knob is formed integral at the top of the 25 handle 1 having a recess 11 which may be formed in any

shape except round shape, adapted to receive a nipple cleaner 6 having a protuberance 61 of the same shape to be inserted into the recess 11. The top portion of the nipple cleaner 6 is also made of the same material as the outer portion of the arms 2 and the scraper 3 and is in a nipple shape, as shown in FIG. 7. In this manner, when it is required to clean a nipple 7, simply sleep the nipple 7 on the nipple cleaner 6 and spin, the nipple cleaner 6 shall clean the inside of the nipple 7.

10 The two arms 2 may extend in a slanting manner and cross to each other as shown in FIG. 8 with one arm 2 bend upwardly in parallel to the inner wall of a glass and the other arm 2 having the scraper 3 bent in parallel to the inner bottom of the glass.

15 The angle of the arms 2 and the scraper 3 may vary from a right angle, as shown in FIGS. 1, 4 and 6, to an obtuse angle, as shown in FIGS. 8, 9, 10 or 11 so as to clean the inner bottom portion of glasses with various
20 angles.

I CLAIM:

1. A cleaning tool for bottle or glass essentially composed of a handle of any shape, two integral arms extending downwardly therefrom in parallel to each other, and an integral scraper perpendicularly extending from bottom end of one of said arms thereto, said handle, said arms, and said scraper being made from flexible material, the outer portions of said arms and said scraper being attached with scratching material.
- 10 2. A cleaning tool for bottle or glass, of claim 1, wherein said arms are bent cross to each other having one end extending vertically and the other end extending horizontally thereto.
- 15 3. A cleaning tool for bottle or glass of claim 1, wherein two arcuate shape shoulders are formed at upper portions of said arms.
- 20 4. A cleaning tool for bottle or glass of claim 1, wherein said handle has a recess at top portion adapted to receive a nipple cleaner, said recess is in any shape with the exception of round shape.
- 25 5. A cleaning tool for bottle or glass of claims 1 and 4, wherein said nipple cleaner has a protuberance having the same shape as of said recess adapted to be inserted into said recess, the top portion of said nipple cleaner has the same shape as of a nipple.
6. A cleaning tool for bottle or glass of claim 1,

wherein said scraper has length larger than the distance between said two arms.

7. A cleaning tool for bottle or glass of claim 1, wherein a leaf spring is connected to the corner of said 5 arms and said scraper is connected and extending upwardly therefrom having the other end of said leaf spring in touch with the other arm.

8. A cleaning tool for bottle or glass of claim 1, wherein the connecting area between said arm and said 10 scraper is in arcuate shape.

Relevant Technical fields

Search Examiner

A HABBIJAM

(i) UK CI (Edition K) A4F: A4K

(ii) Int CI (Edition 5) B08B

Databases (see over)

Date of Search

(i) UK Patent Office

18 NOVEMBER 1992

(ii) ONLINE DATABASES: WPI

Documents considered relevant following a search in respect of claims 1-8

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 1086947 (HODGES) See arms 3a-3d and sponge pads 1a-1d in Figure 1	1
A	US 4317249 (BENSON)	

Category	Identity of document and relevant passages C1 -	Relevant to claim (1)

Categories of documents

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Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

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P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

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